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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,275	05/25/2001	Frank J. DeGilio	POU920010080US1	3625
7590 IBM Corporation Intellectual Property Law 2455 South Road, P386 Poughkeepsie, NY 16201		03/26/2007	EXAMINER CRAIG, DWIN M	
			ART UNIT 2123	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	03/26/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/865,275

Applicant(s)

DEGILIO ET AL.

Examiner

Dwin M. Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-17 have been presented for reconsideration based on Applicants' amended claim language and arguments, claims 18-20 have been presented for examination.

Information Disclosure Statement

2. The IDS submitted on 12/17/2001 is objected to, the listing of US non-provisional Patent Application numbers in the IDS is improper. Applicants' need to list the serial numbers of a US Non-provisional patent applications on a separate from the 1449 or provide the US-PGPUB publication numbers. The examiner considered the submitted list of the US non-provisional Patent Applications.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2123

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3-7, 9-11 and 13-20 are rejected under 35 USC 103(a) as being unpatentable over US Patent 6,718,218 Matheson in view of US Patent 6,614,430 Rappoport.

3.1 As regards independent claims 1, 7 and 11 and using independent claim 1 as an example, *Matheson* teaches, *a method of facilitating the information gathering and documentation phases of a custom design process, said method comprising the steps of: generating a first set of data structures for storing design constraint information (Col. 2 lines 18-33), responsive to a previously obtained list of inputs; said inputs identifying any invariant external constraints and preexisting issues affecting the custom design process (Col. 2 lines 10-49 more specifically “CAD Model object model which captures and stores various object models containing articles of information and their associated relationships in an object model database” the claimed limitations of *previously obtained list of inputs* is being interpreted to be any pre-existing or stored CAD objects, further and in regards to the limitation of *invariant external constraints* these constraints could be interpreted to be attributes of the stored objects that are not changed during the design process, *Matheson* fails to suggest that the objects that are stored are changed in any manner during the design process and therefore a default assumption is the stored objects*

Art Unit: 2123

are *invariant* and so the cited reference reads on the claimed limitation that the stored objects contain *invariant external constraints*), *said first set of data structures comprising two or more tables* (Figure 4 references 320, 340, 330, 350, 360, 370, 380 & 390 and Figures 5-7 and Col. 5 lines 52-67 and Col. 6 lines 1-56), *at least one of said tables in said first set being used to store firm design constraints* (Col. 2 lines 29-33 and Col. 4 lines 13-62), *at least one other of said tables in said first set being used to hold flexible design constraints* (Figure 5 reference 500 & Col. 6 lines 14-22); *and determining said design constraint information; and storing said design constraint information in at least one of said two or more tables* (Figures 5-7 and Col. 6 lines 14-56); *and assigning a class attribute to each design constraint* (Figure 3 and Col. 5 lines 1-30 specifically lines 9-10, "The attributes for each interface are displayed in FIG. 3."); *and generating a second set of data structures for processing said design constraint information* (Figure 2 reference 120a, 120b, 130a, 130b, 140a, 140b), *said second set of data structures being greater in number than said first set, said class attributes determining the relationship between said first set of data structures and said second set of data structures* (Figure 2 and Figure 8 and Col. 6 lines 56-67 and Col. 7 lines 1-67 the examiner notes that the *notes* tables could be less in number than the first set of tables).

However, *Matheson* does not expressly disclose *translating said stored design constraint information from said first set of data structures into said second set of data structures for subsequent processing during said custom design process*.

Rappoport teaches *translating a stored design constraint information from a first set of data structures into a second set of data structures for subsequent processing during a custom design process* (Figure 1B references 170 & 180 and Col. 3 lines 58-67 and Col. 4 lines 1-49 and

Art Unit: 2123

Col. 5 lines 66-67 and Col. 6 lines 1-18 and Col. 6 lines 35-45 and as regards attributes Col. 11 lines 25-35).

Matheson and *Rappoport* are analogous art because they are from the same field of endeavor of CAD design process modeling.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide the methods of CAD data translation as disclosed in *Rappoport* to the CAD design process methods of *Matheson*.

The motivation to do so would be to provide a method of using any design data created using the CAD methods of *Matheson* in any other CAD design tool by having the ability to translate the data from one format to another without losing any design information (see *Rappoport* Col. 6 Lines 36-44).

Therefore, it would have been obvious to combine *Rappoport* with *Matheson* to obtain the invention specified in claims 1, 3-7, 9-11 and 13-20.

3.2 As regards dependent claims 3, 4, 9, 10, 13 and 14 and using dependent claims 3 & 4 as examples, *Matheson* teaches tables/data structures that contain both firm and flexible design constraints (Figures 4-8 note in Figures 5-7 the different types of tables and Col. 5 lines 52-67 and Col. 6 lines 1-67 and Col. 7 lines 1-16).

3.3 As regards dependent claims 5 & 15 and using dependent claim 5 as an example, *Matheson* teaches an electronic computer (Col. 1 line 11 "Computer Aided Design...").

3.4 As regards dependent claim 6 *Matheson* does not expressly disclose, *translating* CAD data on a computer.

Art Unit: 2123

However, *Rappoport* discloses *translating* CAD data on a computer (Col. 1 lines 15-21 and Col. 4 lines 16-33).

3.5 As regards dependent claim 16 *Matheson* discloses a pointing device (Figure 8 & Col. 3 lines 11-12 "...a graphical user interface..." the examiner notes that GUI on computer systems require the use of a pointing device).

3.6 As regards dependent claim 17, *Matheson* discloses, a text input device (Figure 8 & Col. 6 lines 47-56 "...Data may be captured when a user manually enters data via a user interface dialog...").

3.7 As regards dependent claim 18, *Matheson* does not specifically mention a workstation-based application, however, *Rappoport* teaches the use of different software "systems" for use with CAD data (Col. 1 lines 15-21).

3.8 As regards dependent claim 19, *Matheson* discloses a method of annotating objects with comments (Figure 8 and Col. 3 lines 11-12 "...create a note dialog in a graphical user interface..." and Col. 7 lines 13-16 "The content field 824, which contains the substantive information of the Design Note, is filled in by the user...")

3.9 As regards dependent claim 20, *Matheson* discloses the use of a GUI (Figure 8 and Col. 3 lines 10-12).

4. Claims 2, 8 and 12 are rejected under 35 USC 103(a) as being unpatentable over US Patent 6,718,218 Matheson in view of US Patent 6,614,430 Rappoport and in further view of US Patent 5,850,539 Cook.

Art Unit: 2123

4.1 Regarding dependent claims 2, 8 and 12 neither *Matheson* nor *Rappoport* expressly disclose, an information technology design process.

However, *Cook* teaches an information technology design process (Figures 2-21 and Col. 2 lines 50-57 and Col. 6 lines 65-67 and Col. 7-14 and Col. 15 lines 1-47).

Matheson, *Rappoport* and *Cook* are analogous art because they are from the same field of endeavor, Computer Aided Design CAD.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have used the information technology design process method of *Cook* with the CAD design methods of *Matheson* and *Rappoport*.

The motivation for doing so would have been the need in the information technology design process art to take into account the thermal requirements of rack mounted computer systems see (*Cook* Col. 2 lines 5-65).

Therefore, it would have been obvious to combine, *Cook* with *Rappoport* and *Matheson* in order to obtain the invention specified in claims 2, 8 and 12.

Response to Arguments

5. Applicant's arguments filed 12/20/2006 have been fully considered but they are not persuasive.

5.1 Applicant argued on page 7 of the 12/20/2006 responses that, "*In no way, Rappoport suggests that previously examined data can be analyzed and translated in a way to obtain a design process or solution...* ". The Examiner respectfully traverses Applicants' argument, *Rappoport* was relied upon by the examiner to provide a teaching of translating CAD objects

Art Unit: 2123

from one format into another format, *Rappoport* performs just such a function and *Rappoport* is directed towards CAD systems which are used in design processes. Applicants' further argued, "*The translation step in the present application, by contrast is not to provide data access and usability between two machines*" *Rappoport* was relied upon to teach translation of CAD data, incidental to this functionality is the use of *Rappoport* teaches communications between two machines, Applicants' claim language reads, *translating said stored design constraint information from said first set of data structures into said second set of data structures for subsequent processing during said custom design process*, *Rappoport* was not relied upon to teach a custom design process, only to teach the data translation of a stored design.

5.2 Regarding the combination with *Cook* with *Matheson* and *Rappoport* the Examiner maintains that the current rejection is proper in the *Cook* teaches the use of CAD systems for information systems designs as claimed and would be obvious for the reasons stated in the rejection.

5.3 The Examiner notes that Applicants' failed to submit a new PTO form 1449 in the proper format as required in the previous office action therefore, the previous objection to the IDS submitted on 12/17/2001 is maintained.

Specification

6. Applicants' specification is objected to for the following reason, the following U.S. non-provisional Patent Applications have matured into patents, application number 09/456,274 has matured into U.S. Patent 6,557,008 and application number 09/183,961 has matured into U.S. Patent 6,247,769 application number 09/385,482 has matured into U.S. Patent number 6,587,833 and application number 09/385,176 has matured into U.S. Patent 6,260,020 and application

Art Unit: 2123

number 09/386,046 has matured into U.S. Patent number 6,526,387 and application 09/385,936 has matured into U.S. Patent number 6,675,149 and application number 09/386,057 has matured into U.S. Patent number 6,968,324 and application number 09/386,057 has matured into U.S. Patent 6,968,324 and application number 09/183,961 has matured into U.S. Patent number 6,249,769 and application number 09385176 has matured into U.S. Patent 6,260,020 and application number 09/386,046 has matured into U.S. Patent number 6,526,387 and application number 09/386,057 has matured into U.S. Patent number 6,968,324. These Applications are listed on pages 3 & 4 of the specification. The specification needs to be amended to reflect the fact that these cited applications have matured into patents.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

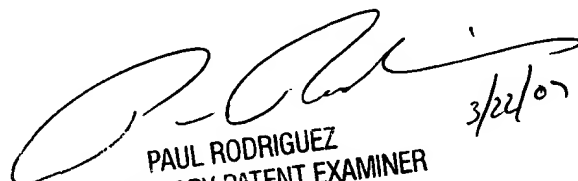
Art Unit: 2123

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3/22/07